CS 355

Zephaniah Amonoo-Harrison

HW #1

05/24/2021

1. The three fundamental features of object-oriented programming are;
   1. Encapsulation
   2. Inheritance
   3. Polymorphism
2. A compiler produces a faster program, and this is because a compiler translates a whole code into machine language and executes it once. A pure interpreter analyzes each code statement at a time.
3. Yes, I strongly believe this because language helps to shape our thoughts. I believe one can not fully think properly without the use of a language. There are studies that show that being fluent in more than one language increases one’s Emotional Intelligence (EQ) which is the ability of individuals to recognize their own emotions and as well as those of others using discernment. This can be said about both natural and programming languages. In programming, one cannot fully form ideas or thoughts about something they want to code without the use of a language that they truly understand.
4. There are 3 things I believe are necessary for a programming language to be complete.
   1. Simplicity – A language has to be simple enough to be learnt and taught. A programmer must be able to know everything about the language in and out.
   2. Speed and Efficiency – A perfect programming language must do its job efficiently and be fast to work with. If this said language can emulate how an actual computer works, it would do wonders.
   3. Readability – A big issue with many programmers is understanding what they have coded and how it can be read and edited in the near or far future. If this language could be understood and evolved as time goes on, then it would make for a perfect language.